

Common Name (Park-specific): **Old Field (Hawthorn subtype)**

SYNONYMS

NVC English Name: Orchard Grass - Sheep-sorrel Herbaceous Vegetation
NVC Scientific Name: *Dactylis glomerata* - *Rumex acetosella* Herbaceous Vegetation
NVC Identifier: C EGL006107

LOCAL INFORMATION

Environmental Description: This type occurs on the gentle to steeply sloping fields above the former lakebed of Lake Conemaugh and surrounding the park's visitors center. The Hawthorn subtype occurs in areas that were probably farmed or used as pastureland prior to the creation of the park, but are no longer actively managed or mowed. The soil is typically moderately well-drained silt loam or clay loam.

Vegetation Description: The Hawthorn subtype is characterized by a sparse to dense tall-shrub layer and scattered established small trees. The tall shrubs, primarily hawthorns (*Crataegus* spp.) and apples (*Malus* spp.), may cover up to 50% of the field. Scotch pine (*Pinus sylvestris*), red maple (*Acer rubrum*), and black cherry (*Prunus serotina*) saplings and small trees (<40 feet tall) may also be present, seeded in from nearby conifer plantations and red maple - black cherry successional forests or woodlands. The ground story of this subtype is similar in composition to the herbaceous subtype, with a high cover of various grassland species and goldenrods (*Solidago* spp.). The relatively higher percent cover of woody species in these areas as compared with the herb-dominated old fields may simply be due to the difference in management.

Most Abundant Species:

| <u>Stratum</u> | <u>Lifeform</u> | <u>Species</u> |
|---------------------|------------------------------|---|
| Tree subcanopy | Broad-leaved deciduous tree | <i>Prunus serotina</i> , <i>Acer rubrum</i> |
| Tall shrub/sapling | Broad-leaved deciduous shrub | <i>Crataegus</i> spp., <i>Malus</i> spp. |
| Short shrub/sapling | Broad-leaved deciduous shrub | <i>Rubus allegheniensis</i> |
| Herb (field) | Graminoid | <i>Phleum pratense</i> , <i>Anthoxanthum odoratum</i> |
| Herb (field) | Forb | <i>Solidago</i> spp., <i>Euthamia graminifolia</i> , |
| Vine | Vine | <i>Parthenocissus quinquefolia</i> |

Characteristic Species: *Crataegus* spp., *Malus* spp., *Prunus serotina*, *Acer rubrum*, *Solidago* spp. (numerous species), *Phleum pratense*, *Anthoxanthum odoratum*, *Euthamia graminifolia*, *Andropogon gerardii*.

Other Noteworthy Species: Information not available.

Local Range: This vegetation type occurs in the fields above the former lakebed of Lake Conemaugh and surrounding the park's visitor center.

Classification Comments: The vegetation structure and species composition of the old fields in Johnstown Flood vary widely. The structure and composition of the old fields are influenced by past land use, current management prescriptions, and hydrology. The old field vegetation can be divided into three subtypes: Herbaceous, Wet Meadow and *Crataegus* subtypes. Within one mapped old field polygon, multiple subtypes can be present. The boundaries and distinctions between these subtypes may not be definitive in the field. Despite the high cover of woody plants in this vegetation type, the most appropriate NVC crosswalk is Orchard Grass - Sheep-sorrel Herbaceous Vegetation (CEGL006107).

Other Comments: None.

Local Description Authors: S.J. Perles (PNHP).

Plots: AA Points 6, 17.

GLOBAL INFORMATION

NVC CLASSIFICATION

| | |
|------------------------------|--|
| Physiognomic Class | Herbaceous Vegetation (V) |
| Physiognomic Subclass | Perennial graminoid vegetation (V.A.) |
| Physiognomic Group | Temperate or subpolar grassland (V.A.5.) |
| Physiognomic Subgroup | Natural/Semi-natural temperate or subpolar grassland (V.A.5.N.) |
| Formation | Medium-tall sod temperate or subpolar grassland (V.A.5.N.c.) |
| Alliance | <i>Dactylis glomerata</i> - <i>Rumex acetosella</i> Herbaceous Alliance (A.1190) |
| Alliance (English name) | Orchard Grass - Sheep-sorrel Herbaceous Alliance |
| Association | <i>Dactylis glomerata</i> - <i>Rumex acetosella</i> Herbaceous Vegetation |
| Association (English name) | Orchard Grass - Sheep-sorrel Herbaceous Vegetation |
| Ecological System(s): | Information not available |

GLOBAL DESCRIPTION

Concept Summary: This broadly defined vegetation type includes pasture and post-agricultural fields and is largely composed of nonnative grasses and herbs in the early stages of succession (generally of European origin). Physiognomically, these grasslands are generally comprised of mid-height (1-3 feet tall) grasses and forbs, with occasional scattered shrubs. Species composition varies from site to site, depending on land-use history and perhaps soil type, but in general, this vegetation is quite wide-ranging in northeastern and midwestern states, and at higher elevations (610-1220 m [2000-4000 feet]) in the southeastern states. In addition to the nominal species, other associates may include *Phleum pratense*, *Lolium perenne*, *Agrostis hyemalis*, *Elymus repens*, *Oxalis stricta*, *Schizachyrium scoparium*, *Achillea millefolium*, *Asclepias syriaca*, *Chenopodium album*, *Bromus tectorum*, *Bromus inermis*, and many others.

Environmental Description: Information not available.

Vegetation Description: In addition to *Dactylis glomerata* and *Rumex acetosella* these grassy fields are characterized by *Symphyotrichum* spp. (including *Symphyotrichum lateriflorum* var. *lateriflorum* and *Symphyotrichum novae-angliae*), *Rudbeckia hirta*, *Pteridium aquilinum*, *Chenopodium album*, *Asclepias syriaca*, *Andropogon virginicus*, *Schizachyrium scoparium*, *Phytolacca americana*, *Phleum pratense*, *Poa pratensis*, *Poa compressa*, *Elymus repens*, *Bromus inermis*, *Solidago* spp. (including *Solidago rugosa*, *Solidago nemoralis*, *Solidago juncea*, *Solidago canadensis*, *Solidago altissima*), *Euthamia graminifolia*, *Oenothera biennis*, *Potentilla simplex*, *Daucus carota*, *Ambrosia artemisiifolia*, *Hieracium* spp., *Taraxacum officinale*, *Vicia cracca*, *Trifolium* spp., and many others.

Most Abundant Species: Information not available.

Characteristic Species: Information not available.

Other Noteworthy Species: Information not available.

USFWS Wetland System: Information not available.

DISTRIBUTION

Range: This vegetation is quite wide-ranging in northeastern and midwestern states, and possibly occurs at higher elevations in the southeastern states.

States/Provinces: CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, TN, VA, VT, WV.

Federal Lands: NPS (Cape Cod, Cumberland Gap, Fort Necessity, Johnstown Flood, Morristown).

CONSERVATION STATUS

Rank: GNA (invasive) (28-Jan-2002).

Reasons: This vegetation type includes pasture and post-agricultural fields, and is largely composed of nonnative grasses and herbs (generally of European origin).

CLASSIFICATION INFORMATION

Status: Standard.

Confidence: 3 – Weak.

Comments: Information not available.

Similar Associations:

Dactylis glomerata - *Solidago* spp. Herbaceous Vegetation (CEGL006517)

Lolium (arundinaceum, pratense) Herbaceous Vegetation (CEGL004048)

Phleum pratense - *Bromus pubescens* - *Helenium autumnale* Herbaceous Vegetation (CEGL004018)

Related Concepts: Information not available.

SOURCES

Description Authors: Information not available.

References: Eastern Ecology Working Group n.d.